

WE CLAIM:

1. An apparatus comprising:

(a) a substrate including a deposition region and an optional uncoated region, wherein the deposition region includes a level intermediate region disposed between a first end region and a second end region,

wherein the first end region includes a first recessed surface portion that increases the surface area of the first end region, wherein the first recessed surface portion is recessed below the level intermediate region, wherein the surface area of the first end region is greater by at least about 5% than the surface area of a hypothetical level first end region; and

(b) a dip coated layer over the entire deposition region.

2. The apparatus of claim 1, wherein the substrate is a cylinder.

3. The apparatus of claim 1, wherein the uncoated region is present.

4. The apparatus of claim 1, wherein the first recessed surface portion includes at least one groove.

5. The apparatus of claim 1, wherein the first recessed surface portion includes a tapered surface.

6. The apparatus of claim 1, wherein the first recessed surface portion includes a stepped area.

7. The apparatus of claim 1, wherein the dip coated layer comprises a charge transport material.

8. The apparatus of claim 1, wherein the surface area of the first end region is greater than the surface area of the hypothetical first end region by an amount ranging from about 5% to about 40%.

1 9. The apparatus of claim 1, wherein the surface area of the first end region is
2 greater than the surface area of the hypothetical first end region by an amount ranging
3 from about 10% to about 30%.

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5 10. The apparatus of claim 1, wherein the portion of the dip coated layer over
6 the first end region is substantially level.

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8 11. The apparatus of claim 1, wherein the second end region includes a second
9 recessed surface portion that increases the surface area of the second end region,
10 wherein the second recessed surface portion is recessed below the level intermediate
11 region, wherein the surface area of the second end region is greater by at least about 5%
12 than the surface area of a hypothetical level second end region.

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14 12. A coating method comprising:

15 (a) providing a substrate including a deposition region and an optional uncoated
16 region, wherein the deposition region includes a level intermediate region disposed
17 between a first end region and a second end region,

18 wherein the first end region includes a first recessed surface portion that
19 increases the surface area of the first end region, wherein the first recessed surface
20 portion is recessed below the level intermediate region, wherein the surface area of the
21 first end region is greater by at least about 5% than the surface area of a hypothetical
22 level first end region;

23 (b) dip coating a layer of a coating solution over the first end region, the
24 intermediate region, and the second end region in the recited sequence.

25
26 13. The method of claim 12, wherein the substrate is a cylinder.

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28 14. The method of claim 12, wherein the first recessed surface portion includes
29 at least one groove.

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31 15. The method of claim 12, wherein the first recessed surface portion includes
32 a tapered surface.

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34 16. The method of claim 12, wherein the first recessed surface portion includes
35 a stepped area.

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2 17. The method of claim 12, wherein the dip coated layer comprises a charge
3 transport material.
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5 18. The method of claim 12, wherein the surface area of the first end region is
6 greater than the surface area of the hypothetical first end region by an amount ranging
7 from about 5% to about 40%.
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9 19. The method of claim 12, wherein the surface area of the first end region is
10 greater than the surface area of the hypothetical first end region by an amount ranging
11 from about 10% to about 30%.
12

13 20. The method of claim 12, wherein the portion of the dip coated layer over
14 the first end region is substantially level.
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